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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,871	02/27/2004	Michael L. Bolind	30365/39652	7113

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EXAMINER

WILSON, GREGORY A

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/788,871

Applicant(s)

BOLIND ET AL.

Examiner

Gregory A. Wilson

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 68-70 is/are allowed.
- 6) ☒ Claim(s) 1-5, 12-15, 17-19, 22, 25, 26, 29, 35-37, 39, 44-46, 48-50, 53, 55, 56, 58, 63, 65 and 66 is/are rejected.
- 7) ☒ Claim(s) 6-11, 16, 20, 21, 23, 24, 27, 28, 30-34, 38-43, 47, 51, 52, 54, 57, 59-62, 64 and 67 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 12-15, 17-19, 22, 25, 26, and 29 are rejected under 35

U.S.C. 102(b) as being anticipated by **Page et al (4,161,390)**. **Page et al** discloses an apparatus for calcining gypsum and includes a housing (10) having an open top (hence it has a opening in breach 27), a bottom wall (13), and a plurality of side walls (15), a fixture (28) for receiving raw gypsum, a support floor (157) for holding the gypsum, a burner (11) connected to the housing and having a conduit which has a serpentine path (SEE conduits 192-203), an agitation mechanism (20) agitates the gypsum adjacent the floor when it moves by way of a movable (pivotable) arms coupled to a rotating means (not shown in the drawings) (SEE column 2, lines 63-65) providing an arcuate path, and furthermore discloses a discharge gate (29) (ie: dump port), and exhaust stack (101).

Claims 35-37, 39, 44-46, 48-50, 53, 55, 56, 58, 63, 65, and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by **Bounini (4,626,199)**. **Bounini** discloses a calcining apparatus (10) and includes a housing having an open top (hence

it has a vent 29), a bottom wall and a plurality of side walls, a fixture (14) connected to the housing for introducing the gypsum, a burner (20) extending through the top side wall and has a burner conduit (26) extending from the burner which reduces in diameter and discharges exhaust flow into the gypsum inherently causing fluidization of the gypsum, an agitation mechanism (12) operable to mix the gypsum and prevent dead pockets of gypsum adjacent the bottom wall wherein the agitation mechanism is inherently controlled by a power source, the calcining apparatus furthermore includes an overflow tube (66), exhaust stack (70) and a dump port (27). Bounini discloses the burner conduit having an opening for allowing exhaust to flow directly into the gypsum.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Page et al (4,161,390)** in view of **Kirkpatrick et al (5,333,597)**. **Page et al** discloses the applicants primary inventive concept as stated above but does not specifically recite the burner conduit forming into a plurality of smaller diameter conduits. **Kirkpatrick et al** teaches in Figure 1, a burner conduit (35) branching off into multiple smaller conduits (17). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have modified the burner

conduit of Page et al to branch off into multiple smaller conduits as taught by Kirkpatrick et al for the purpose of providing more surface area thus increasing heat transfer of the exhaust gas to the gypsum.

Allowable Subject Matter

Claims 68-70 are allowed.

Claims 6-11, 16, 20, 21, 23, 24, 27, 28, 30, 31-34, 38-43, 47, 51, 52, 54, 57, 59-62, 64, and 67 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

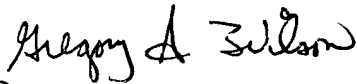
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. Wilson whose telephone number is (571)272-4882. The examiner can normally be reached on 7 am - 4:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3749

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**GREGORY WILSON
PRIMARY EXAMINER**



Gaw

April 13, 2006